

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of MD 543 and Wheel Road in Harford County, Maryland. MD 543 is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection is to be modified to operate in a NEMA six (6) phase, full-traffic-actuated mode. There is an exclusive/permissive left turn phase for the northbound movement of MD 543. The MD 543 through movements operate concurrently. There will be an exclusive/permissive left turn phase for the westbound movement of Wheel Road. The Wheel Road through movements will operate concurrently.

The existing cabinet/controller will be utilized. One 4-channel rack mounted time delay output loop detector amplifier is to be added.

EQUIPMENT LIST

A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
1	EA	818	One 4-channel loop detector amplifiers.
1	EA	814	12 in., one-way, three section (R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in., one-way, five section (R,Y,YA,G,GA) adjustable blacked faced traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in./8 in., one-way, five section (12 in. YA, GA/ 8 in. R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	813	36 in. x 42 in. R 10-12 sign with mast arm mounting hardware.
3	EA	---	Micro-loop probe (set of 3) with 500 ft. lead-in cable.

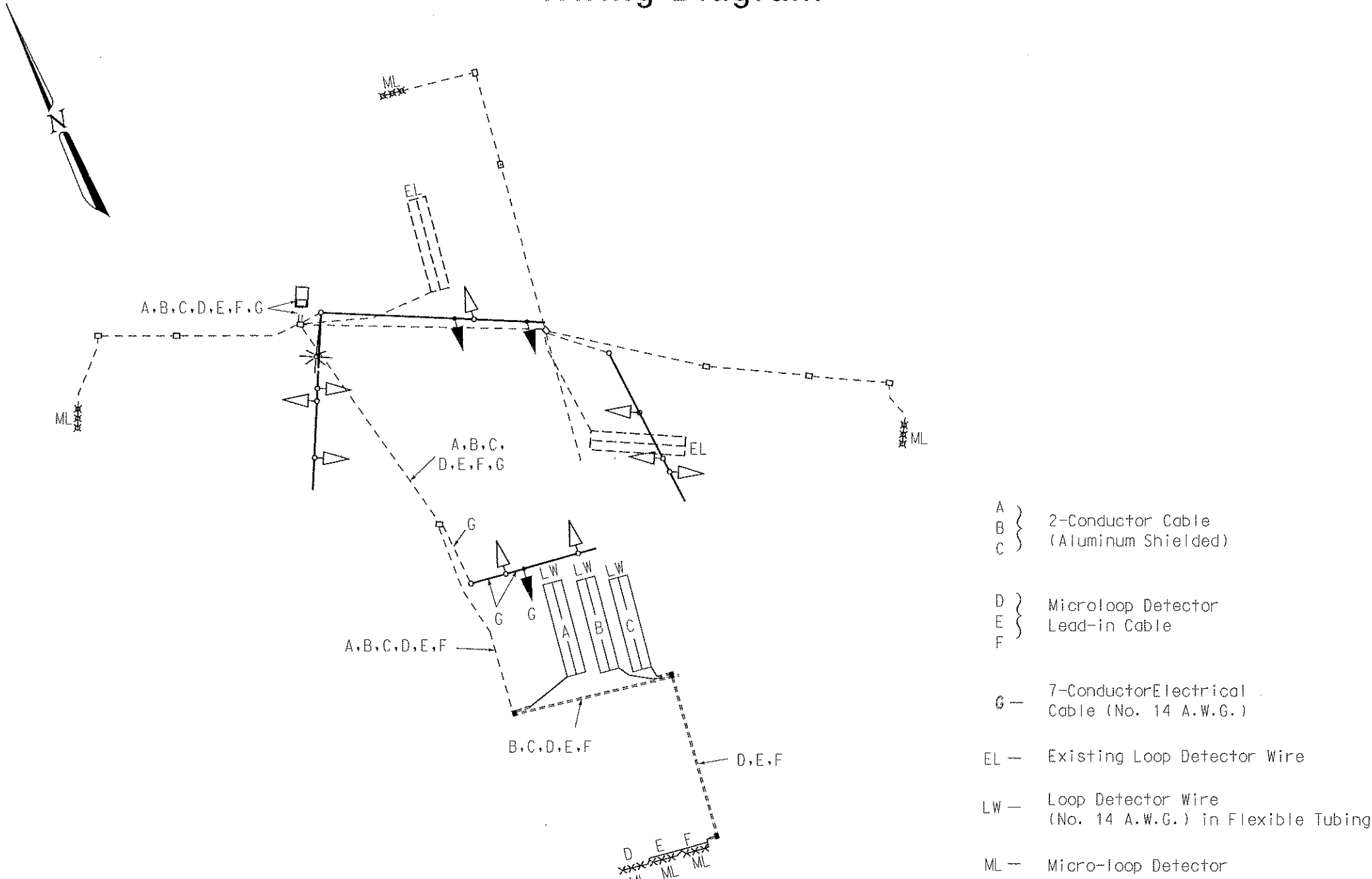
B. Equipment to be furnished and/or installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
1	CY	205	Test pit excavation.
3	EA	811	Handhole.
420	LF	815	Sawcut for signal loop detector.
1375	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
200	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
700	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
15	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
55	LF	805	2 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
55	LF	805	2 in. polyvinyl chloride (Schedule 80) electrical conduit - slotted in roadway.
40	LF	556	24 in. wide HAPPTM - white for stop line.
Lump Sum	LS	---	Remove existing traffic signal equipment.
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

Phase Chart

	1	2	3	4	5	6	7	8	9	10	9	10	
	O	R	R	O	R	R	O	R	R	O	R	R	
	O	Y	Y	O	Y	Y	O	Y	Y	O	Y	Y	
	O	G	G	O	G	G	O	G	G	O	G	G	
Phase 2 & 5		R	R	R	G	G		R	R	R	R	R	
5 Change		R	R	R	G	G		R	R	R	R	R	
Phase 2 & 6		G	G	G	G	G		R	R	R	R	R	
2 & 6 Change		Y	Y	Y	Y	Y		R	R	R	R	R	
Phase 3 & 8		R	R	R	R	R		G	G	R	R	R	
3 & 8 Change		R	R	R	R	R		G	G	R	R	R	
Phase 4 & 8		R	R	R	R	R		G	G	G	G	G	
4 & 8 Change		R	R	R	R	R		Y	Y	Y	Y	Y	
Flashing Operation		FL/Y	FL/Y	FL/Y	FL/Y	FL/Y		FL/R	FL/R	FL/R	FL/R	FL/R	

Wiring Diagram



CONTACT LIST

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Revision "A"	APPROVALS		MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION (General Information Plan) MD 543 at Wheel Road			
 The Traffic Group, Inc. 410-931-6600 Figs. 410-931-6601	TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION	DRAWN BY: <u>Frank Hoeckel</u>		F.A.P. NO. <u>N/A</u>	TS NO. <u>GI-3539A</u>	SHEET NO. <u>2</u> OF <u>2</u>
	ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION	CHECKED BY: <u>N/A</u>		S.H.A. NO. <u>BW996M82</u>	T.I.M.S. NO. <u>D820</u>	
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	SCALE: <u>N/A</u>		COUNTY: <u>Harford</u>		
	DIRECTOR, TRAFFIC & SAFETY	DATE: <u>May 22, 2000</u>		LOG MILE: <u>12054303.76</u>		